Amendments to the Specification

Page 5,   please replace the paragraph spanning lines 9-18 with the following rewritten paragraph:

Herein, the strain used in formula (1) is an industrially simple strain, that is, true strain e. For example, supposing the initial area of steel bar to be S_0 and the C-section area after rolling to be S, the reduction of area R is expressed as

$$R = (S_0 - S) / S_0 \qquad (2)$$

Hence, the true strain e is

$$e = -Ln(1 - R)$$

Instead of the true strain, plastic strain obtained by finite element method may be used. Calculation of plastic strain is specifically explained in reference documents (Inoue, et al., "Iron and Steel", ~~68~~86 (2000)~~79~~ 793; Keizaburo Harumi, et al., "Introduction to finite element method" (Kyoritsu Publishing), March 15, 1990).

Page 6,   please replace the paragraph spanning lines 6-17 with the following rewritten paragraph:

It is a fifth aspect of the invention to present the warm control rolling method, being characterized in rolling in rolling temperature range of 400°C to 500°C, it is a sixth aspect to present the warm control rolling method, being characterized in manufacturing steel with $Z \geq 12$ or more and mainly composed of texture with average ferrite grain size of 1 μm or less, it is a seventh aspect to present the warm control rolling method, being characterized in starting rolling, in consecutive multipass rolling, by waiting until the rolling entry temperature $T_{x+1\text{-in}}$ of X+1-th pass becomes $T_S+20 \geq T_{x+1\text{-in}}$ when the rolling temperature $T_{x\text{-out}}$ right after X-th pass is higher than the rolling set temperature T_S, and it is an eighth aspect to present the warm control rolling method, being characterized in measuring the processing heat generation T_{xH} at X-th pass in multipass rolling beforehand, and defining the rolling entry temperature $T_{x\text{-in}}$ in the relation of $T_{xs} \geq T_{x\text{-in}} \geq T_{xS} - $ ~~$T_{x\text{-H}}$~~ T_{xH}, supposing T_{xS} to be rolling set temperature.

2

Page 8, please replace the paragraph spanning line 26 through page 9, line 8 with the following rewritten paragraph:

Herein, the strain used in formula (1) may be an industrially simple strain, that is, true strain e. For example, supposing the initial area of steel bar to be S_0 and the C-section area after rolling to be S, the reduction of area R is expressed as

$$R = (S_0 - S) / S_0 \qquad (2)$$

Hence, the true strain e is

$$e = -Ln(1 - R)$$

Instead of the true strain, plastic strain obtained by finite element method may be used. Calculation of plastic strain is specifically explained in reference documents (Inoue, et al., "Iron and Steel", ~~68~~ 86 (2000) 793; Keizaburo Harumi, et al., "Introduction to finite element method" (Kyoritsu Publishing), March 15, 1990).

Page 11, please replace the paragraph spanning lines 4-9 with the following rewritten paragraph:

In the invention, as described above, in consecutive multipass rolling, if the rolling temperature $T_{x\text{-out}}$ right after x-th pass is higher than the rolling set temperature Ts, rolling should be preferably started after waiting until the rolling entry temperature $T_{x+1\text{-in}}$ of x+1-th pass becomes ~~Ts+20~~ $T_s+20 \geq T_{x+1\text{-in}}$, or by preliminarily measuring the processing heat generation T_{xH} at x-th pass, it may be desired to set rolling entry temperature $T_{xs} \geq T_{x\text{-in}} \geq T_{xs}-T_{xH}$ supposing T_{xs} to be the rolling set temperature.

Page 16, please replace the paragraph spanning lines 2-10 with the following rewritten paragraph:

In succession to embodiment 1, further 2 passes were rolled until 17 × 17 mm. Caliber shapes are oval and square. Both are large in deformation, and the processing heat generation was measured by preliminary experiment. As a result, it was found that the material temperature rises by 80°C by consecutive rolling of 2 passes. Accordingly,

in passes 22 and 23, the entry temperatures $T_{22\text{-in}}$, $T_{23\text{-in}}$ were set at 450°C. Since the temperature of pass 21 was 501°C, by waiting until the material temperature dropped to 450°C, and rolling of pass 22 was started. The exit temperature of pass 23 was 514°C. At pass 23, waiting until 464°C, rolling was started, and the exit temperature was 537°C (Table 2 3). The total rolling time was 1112 s, 4.1 and the Z value was 14.1.